5.12 PUBLIC UTILITIES AND SERVICE SYSTEMS

The Ponto Area is located within the Local Facilities Management Plan (LFMP) Zones 9 and 22 of the Carlsbad Growth Management Program; refer to Figure 5.12-1. The Zone 9 LFMP was prepared in April 1999 and amended in September 1993; the Zone 22 LFMP was prepared in October 1988 and amended in August 1997 to reflect land use changes resulting from adoption of the Poinsettia Properties Specific Plan (SP 210), as well as other policy and facility updates. This section of the EIR is intended to evaluate potential significant impacts on existing or future utility and service systems and recreational facilities that may result from project implementation.

Preparation of the LFMPs is required as part of the City's Growth Management Program, Title 21, Chapter 21.90 of the Carlsbad Municipal Code. The LFMP applies assumed generation rates for buildout projections for residential and non-residential uses within the zone. The LFMP identifies existing facilities and provides a phasing schedule to estimate timing for the provision of facilities in relationship to demand, and a financing plan to identify methods of funding for the construction or improvement of such facilities. The LFMP contains conditions of approval to ensure that public facilities will conform to adopted performance standards and require mandatory compliance to regulate future development within the zone.

As stated previously, implementation of the Ponto Beachfront Village Vision Plan would require a General Plan Amendment to change the underlying designation to Area of Special Consideration. The uses envisioned for the Ponto Area under the Vision Plan would result in a decrease in density as compared to that under the existing General Plan designation. As a result, future buildout of the Ponto Area would result in a decreased demand for public facilities and services than that allowed for under the current LFMPs for Zones 9 and 22, thereby decreasing the potential for significant impacts on such facilities to occur.

5.12.1 City Administrative Facilities

5.12.1.1 Existing Conditions

Administrative facilities leased or owned by the City currently include City Hall, the City of Carlsbad Water District, the Faraday Center, the City Redevelopment Department, and the City Public Safety Center, totaling approximately 170,650 square feet. The City's current population is approximately 97,000 people. The LFMP performance standard for provision of administrative facilities requires that 1,500 square feet per 1,000 population be scheduled for construction within a five-year period. Therefore, approximately 145,000 square feet of administrative facilities are required to meet this performance standard. As such, the performance standard is met with the administrative facilities that are currently owned or leased by the City.

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¹ Robertson Ranch Master Plan Final EIR. April 2006.

² http://www.carlsbadca.gov/hr/empdf/srcvl.pdf

5.12.1.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the LFMP performance standard that 1,500 square feet per 1,000 population must be scheduled for construction within a five-year period.
- Result in substantial adverse impacts associated with the provision of new or
 physically altered administrative facilities, the construction of which could cause
 significant environmental impacts to maintain acceptable administrative services.

5.12.1.3 Environmental Impact

Community Facilities District (CFD) No.1 was formed in 1991 to generate funds for the financing of administrative facilities within the City. Such facilities included an addition to the public library, new City Hall complex, improvements to Veterans Memorial Park, and major street improvements to Cannon Road and Faraday Avenue.

Implementation of the Vision Plan would result in a mixture of residential, recreational, and commercial uses within the approximately 50-acre future development area, which would generate both permanent and transient populations. As such, the demand generated for administrative facilities would be varied. The LFMPs for Zone 9 and Zone 22 establish the performance standard of providing 1,500 square feet of administrative space per 1,000 population, the construction of which must be scheduled within a five-year period. As stated above, the demand for such facilities is currently being met.

To maintain conformance with this performance standard for Zones 9 and 22, all landowners within the Ponto Area would be required to pay fees for the financing of such facilities. The LFMPs state that existing City administration facilities are anticipated to be adequate for Zones 9 and 22 through 2006. Neither of the LFMPs requires project-specific special conditions to meet the performance standard in the future.

As the Ponto Beachfront Vision Plan envisions future land uses within the 50-acre Ponto Area, rather than specific numbers of dwelling units or square footage of commercial space, it is difficult to determine the future demand for administrative facilities that buildout of the Ponto Area would generate; however, all future development within the project area would be required to participate in the CFD No. 1 and to demonstrate consistency with the appropriate LFMP for provision of administrative facilities. It is therefore anticipated that with buildout of the Vision Plan, administrative facilities would remain adequate for Zones 9 and 22. Implementation of the Vision Plan would therefore not create the demand for provision of new or physically altered administrative facilities, the construction of which would cause significant environmental impacts to maintain acceptable administrative services. Impacts on administrative facilities would be less than significant.

5.12.1.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.1.5 Impact After Mitigation

No significant impacts to city administrative facilities would occur with the proposed project.

5.12.2 Library Facilities

5.12.2.1 Existing Conditions

Library facilities currently owned or leased by the City total approximately 102,200 square feet.³ The LFMP performance standard for Zones 9 and 22 requires that for every 1,000 population, 800 square feet of library space be scheduled for construction within a five-year period. The City's current population is approximately 97,000, which generates a demand for an estimated 77,600 square feet of library space. Therefore, current library space provided exceeds that required to meet the performance standard.

5.12.2.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the LFMP performance standard that 800 square feet per 1,000 population must be scheduled for construction within a five-year period.
- Result in substantial adverse impacts associated with the provision of new or physically altered libraries, the construction of which could cause significant environmental impacts in order to maintain acceptable library services.

5.12.2.3 Environmental Impact

As stated above, as the Ponto Beachfront Village Vision Plan is intended to provide a guide for future development of the Ponto Area, rather than identify a strict formula for construction, specific numbers for future residential dwelling units are not proposed. However, all development within the Ponto Area would be required to conform to performance standards given in the LFMPs for Zones 9 and 22 to ensure that significant impacts related to the provision of library services do not occur as individual properties are developed over time within the site.

The LFMPs for Zones 9 and 22 indicate that library facilities are anticipated be in conformance with the adopted performance standard through buildout, assuming the construction of facilities scheduled in the City's Capital Improvement Program (CIP). Therefore, no additional facilities are required and no special conditions are required for either Zone.

All development within the Ponto Area would contribute to the funding of library facilities through participation in the Community Facilities District No. 1 and through the payment of Public Facilities Fees (PFF) at the time individual building permits are issued. Therefore, the

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³ Robertson Ranch Master Plan Final EIR. April 2006.

proposed project would not result in adverse impacts associated with the provision of new or physically altered libraries. Impacts would be less than significant.

5.12.2.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.2.5 Impact After Mitigation

No significant impacts to city library facilities would occur with the proposed project.

5.12.3 Wastewater Treatment Facilities

5.12.3.1 Existing Conditions

Wastewater treatment for LFMP Zones 9 and 22 would be provided by the Encina Wastewater Authority (EWA) Plant. The California Regional Water Quality Control Board (RWQCB), San Diego Region has authorized the Encina Wastewater Authority (EWA) to discharge a maximum of 38 million gallons per day (mgd) to the Pacific Ocean through the Encina Ocean Outfall (EOO). The effluent discharged is treated at the Encina Water Pollution Control Facility, the Shadowridge Water Reclamation Facility, and the Meadowlark Water Reclamation Facility. Current flows average 23 mgd. Secondary treated wastewater is discharged through an ocean outfall located approximately 7,000 ft offshore of the mouth of Canyon de las Encinas at a water depth of 135 ft.⁵

The EWA is capable of treating a maximum 36 mgd. As current demand on the facility is approximately 23 mgd, the plant is working at under capacity, thereby allowing for additional treatment potential in the future. Future expansion of the plant is planned in the *Encina WPCF's 2020 Facility Plan Update Report* (February 1993) to accommodate growth through the year 2020, when treatment demand may increase to an estimated 54 mgd.

5.12.3.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

• Not meet the LFMP performance standard that sewer treatment plant capacity is adequate for at least a five-year period.

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⁴ California Regional Water Quality Control Board San Diego Region Addendum No. 3 to Order No. 2000-036, NPDES No. CA0107395. http://www.swrcb.ca.gov/rwqcb9/orders/order_files/2000%20order%20files/2000-036_EncinaWPCP_NPDES%20update.pdf

⁵ California Coastal Water Quality Monitoring Inventory. <a href="http://www.sfei.org/camp/servlet/DisplayProgram?which="http://www.sfei.org/camp/servlet/DisplayProgram.which="http://www.sfei.org/camp/servlet/DisplayProgram.which="http://www.sfei.org/camp/servlet/DisplayProgram.which

 Result in substantial adverse impacts associated with the provision of new or physically altered wastewater facilities, the construction of which could cause significant environmental impacts to maintain acceptable wastewater treatment services.

5.12.3.3 Environmental Impact

The Wastewater Treatment Capacity performance standard requires that treatment plant capacity is adequate for at least a five-year period. The Zones 9 and 22 LFMPs list special conditions that require the sewer district to monitor the Encina Treatment Plant flows on a monthly basis to determine actual flow rates and to identify an early warning of capacity problems. Payment of applicable sewer connection fees would be required by all landowners within the Ponto Area at the time when development is proposed, and prior to the issuance of a building permit. These measures would ensure that future development on the project site would meet the performance standard that capacity of the sewer treatment plant is adequate for at least a five-year period. For Zones 9 and 22, wastewater facilities are therefore anticipated to be adequate through buildout.

Although future development of the Ponto Area would increase the demand on existing wastewater treatment facilities, such development would not result in an overall increase in the City's growth projections. Therefore, the proposed project would not result in land uses that would cause an increase on wastewater facilities over that anticipated by the LFMPs for Zones 9 and 22. The proposed project would therefore not result in adverse impacts associated with the provision of new or physically altered wastewater facilities, the construction of which could cause significant environmental impacts to maintain acceptable wastewater treatment services. Impacts would be less than significant.

5.12.3.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.3.5 Impact After Mitigation

No significant impacts to wastewater treatment facilities would occur with the proposed project.

5.12.4 Park Facilities

5.12.4.1 Existing Conditions

Park facilities within the City are provided for in a series of four quadrants, or districts. LFMP Zones 9 and 22 are located in the Southwest Quadrant – District 3; refer to Figure 5.12-2. The originally adopted LFMPs for Zones 9 and 22 (1989 and 1988 respectively) identified a shortfall in existing and future parks projected for Park District 3, thereby conflicting with the adopted performance standard. Consistent with the LFMP requirements, residential development was prohibited until the park shortage was rectified. However, an analysis was performed in 1987 for an amendment to the Zone 20 LFMP, which is also

within Park District 3. The analysis identified 57 acres of parkland in the southwest quadrant and showed sufficient existing and projected park land through buildout of the Southwest Quadrant. Additionally, implementation of mitigation measures within Zone 19 and the acquisition of Poinsettia Community Park further satisfied conformance with performance standards for parkland within the District.

5.12.4.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the LFMP performance standard that three acres of Community Park or Special Use Area per 1,000 population within a park district must be scheduled for construction within a five-year period.
- Result in substantial adverse impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts to maintain acceptable park services.

5.12.4.3 Environmental Impact

Implementation of the Vision Plan would result in creation of a linear park along the west side of (realigned) Carlsbad Boulevard. The public park would be approximately four acres in size and would offer a multi-use path, picnic tables, and benches with views to the ocean, among other amenities. Construction is not anticipated to result in substantial adverse impacts associated with the provision of the park, which would cause significant environmental impacts to maintain acceptable park services.

Recreational facilities currently exist at the South Carlsbad State Beach Campgrounds for day users and overnight campers at the campground. The campground offers limited services to users such as campsites, restrooms, and showers. Residents and visitors from the proposed Vision Plan development are not expected to cause a substantial increase in demand for these campground services. Hotel guests, timeshare guests, or residents who choose to use the beach will have their own restroom and shower facilities located across Carlsbad Boulevard from the beach. As such, the proposed Vision Plan development will not add a substantial number of people to the campground area resulting in the overcrowding of existing facilities. Potential impacts are considered less than significant.

As stated above, with adoption of the amendment to the Zone 20 LFMP, sufficient existing and projected parkland was identified through buildout of the Southwest Quadrant. To ensure the continued provision of parkland within the District and conformance with performance standards, landowners within the quadrant are required to pay Park-in-Lieu fees and Public Facilities Fees for the financing of parks, as no additional dedication of parkland is required. The LFMPs for Zones 9 and 22 require this condition. As the provision of parkland within the District is adequate, implementation of the Vision Plan would meet the performance standards and impacts would be less than significant.

5.12.4.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.4.5 Impact After Mitigation

No significant impacts to wastewater park facilities would occur with the proposed project.

5.12.5 Drainage Facilities

5.12.5.1 Existing Conditions

Zones 9 and 22 are located within the Batiquitos Lagoon watershed. Storm water from the site ultimately drains to the south to the adjacent Lagoon or west to the Pacific Ocean. A 78-inch storm drain runs parallel to the San Diego Northern Railroad within Zone 22, and connects to a 78-inch storm drain that runs along the southern boundary of the Zone. An existing 84-inch storm drain connects to this drain and traverses the Ponto Area generally from the northeast to the southwest, where it then runs parallel to the northbound lanes of Carlsbad Boulevard, and then reenters the site in the southwestern corner; refer to Figure 3-6. The 84-inch storm drain collects flows from residential areas to the north for conveyance to Batiquitos Lagoon.

5.12.5.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the LFMP performance standard that drainage facilities must be provided as required by the City concurrent with development.
- Result in substantial adverse impacts associated with the provision of new or physically altered drainage facilities, the construction of which could cause significant environmental impacts to maintain acceptable drainage services.

5.12.5.3 Environmental Impact

The City of Carlsbad Drainage Facilities Master Plan (1994) indicates improvements to address the long-term drainage improvements needed to support projected growth. The current Master Plan differs from the Master Plan under which the Zone 9 and Zone 22 LFMPs were originally prepared in that focus is placed on combined flood control and water quality enhancement, rather than solely flood control. The LFMP performance standard for Zones 9 and 22 requires that drainage facilities be provided concurrent with development to ensure adequate service.

Consistent with the requirements of the LFMP performance standard, drainage improvements are proposed with implementation of the Ponto Beachfront Village Vision Plan. The Vision Plan envisions the relocation of a portion of the existing 84-inch storm drain to the west

along internal streets and then parallel to the northbound lanes of Carlsbad Boulevard; refer to Figure 5.12-3. Drainage from the project site would be conveyed through a series of onsite retention/detention ponds or other means with implementation of the project; refer to Section 5.10 for additional discussion.

Special conditions for Zone 9 and Zone 22 will require the payment of drainage area fees as established in the current Master Drainage Plan, prior to the approval of a development permit. The LFMPs for Zones 9 and 22 indicate that the performance standard will be met and that facilities will be adequate to serve the Zones.

Drainage facilities have been planned and designed to accommodate the growth projections for the City at buildout. Provision of these drainage improvements would be required by the City, as needed and concurrent with development of the Ponto Area to demonstrate conformance with the LFMP performance standards. The proposed development of the project site is not anticipated to result in a significant impact as the result of expansion of new storm water drainage facilities. Therefore, impacts would be less than significant.

As drainage improvements on and off the project site may result in environmental impacts such as traffic, biological resources, hazardous materials, water quality, short-term air quality, or other such resources, mitigation measures given within this EIR would address such potential impacts and would reduce impacts to less than significant.

5.12.5.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.5.5 Impact After Mitigation

No significant impacts to drainage facilities would occur with the proposed project.

5.12.6 Fire Service Protection Services

5.12.6.1 Existing Conditions

The City of Carlsbad Fire Department (CFD) would provide fire protection services to the Ponto Area from its Fire Station No. 4. This station is located approximately 1.0 mile to the northeast of the site, at 6885 Batiquitos Drive. In addition, the southern portion of Zone 9 is served by Fire Station No. 2, located at 1906 Arenal Road. The Carlsbad Fire Department has 78 personnel with 72 sworn professional firefighters and the remaining staff providing support for administrative and fire prevention activities. As stated below, the LFMP performance standard requires that no more than 1,500 dwelling units be outside of a five-minute response time, which begins when the fire truck leaves the station, assuming a 30-mile per hour rate of travel. Traveling at a speed of 30 miles per hour, an emergency vehicle could travel approximately 2.5 miles within five minutes. As the project site is approximately 1.0 miles from Fire Stations No. 4 and 2.5 miles from Station No. 2, emergency vehicles

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⁶ City of Carlsbad. http://www.carlsbadca.gov/fire/orgstr.html

could reach all areas of the project site within the five-minute response time, consistent with the LFMP standards.

5.12.6.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the LFMP performance standard of no more than 1,500 dwelling units outside of a five-minute response time.
- Result in substantial adverse impacts associated with the provision of new or physically altered fire service facilities, the construction of which could cause significant environmental impacts to maintain acceptable fire protection services.

5.12.6.3 Environmental Impact

The project site would be serviced by the CFD, with all proposed dwelling units and other uses being constructed inside of the five-minute response time area. The LFMPs for Zones 9 and 22 anticipate the performance standard being met through buildout. Neither of the LFMPs requires project-specific special conditions to meet the performance standard. Although development of the project site would generate additional dwelling units and other land uses that would incrementally increase the demand for fire and emergency services provided by the CFD, the increase is not anticipated to create the need for new or altered fire protection services. Therefore, following implementation of the Vision Plan, the site would continue to meet the performance standard and the project would not result in a significant impact to fire service protection services or facilities.

5.12.6.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.6.5 Impact After Mitigation

No significant impacts to fire protection services or facilities would occur with the proposed project.

5.12.7 Police Protection Services

5.12.7.1 Existing Conditions

The project site would receive police protection services from the City of Carlsbad Police Department (CPD), located at 2560 Orion Way. Although police services are not addressed within the LFMP, the CDP informally strives to maintain a six-minute response time to emergencies as a general guideline in providing police protection services. The patrol division provides the fundamental base for all law enforcement services. Over 60 uniformed

officers (101 sworn officers) and supervisors work around the clock, seven days a week. There are four watches during a 24-hour period to ensure that officers are present throughout the City at any given time.⁷

5.12.7.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact on police protection services would occur if the project would:

• Have an adverse effect on, or result in a need for new or altered, police protection facilities.

5.12.7.3 Environmental Impact

As with any new development, implementation of the Vision Plan would result in an incremental increase in the demand for police protection services within the City. However, this increase is not anticipated to have an adverse effect on existing police service facilities or create a need for new or altered facilities, and an increase in response times are not expected to be affected. Therefore, impacts would be less than significant.

5.12.7.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.7.5 Impact After Mitigation

No significant impacts to police protection services or facilities would occur with the proposed project.

5.12.8 Open Space

5.12.8.1 Existing Conditions

The majority of the Ponto Area presently stands undeveloped, with the exception of the cluster of single-family residences mixed with light industrial and commercial uses in the northern portion of the site. The LFMP performance standard states that 15 percent of the total land area in the zone, exclusive of environmentally constrained non-developable land, must be set aside for permanent open space and must be available concurrent with development.

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⁷ http://www.carlsbadca.gov/police/strpat.html

5.12.8.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

• Not meet the LFMP performance standard that 15 percent of the total land area in the zone, exclusive of environmentally constrained non-developable land, must be set aside for permanent open space and must be available concurrent with development.

5.12.8.3 Environmental Impact

The LFMP Open Space performance standard requires that 15 percent of the total land area in the zone, exclusive of environmentally constrained non-developable land, must be set aside for permanent open space and must be available concurrent with development. According to the Zone 9 LFMP, the Citywide Facilities and Improvements Plan identifies Zone 9 as being in compliance with the adopted performance standard. No special conditions for Zone 9 are required for conformance with the performance standard. Therefore, no further analysis pertaining to open space is provided. It is anticipated that open space will continue to meet the performance standard through buildout of Zone 9.

Similarly, existing open space meets the current demand according to the adopted LFMP for Zone 22. However, the Zone 22 Open Space Special Conditions require that as all development projects within the Zone are reviewed by the City, individuals must demonstrate how they are contributing to meeting the Zone 22 buildout open space demand. The buildout demand for open space was determined to be 28.14 acres. It is anticipated that open space will continue to meet the performance standard through buildout of Zone 22.

5.12.8.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.8.5 Impact After Mitigation

No significant impacts to open space would occur with the proposed project.

5.12.9 School Facilities

5.12.9.1 Existing Conditions

The LFMP Zones 9 and 22 are located within the Carlsbad Unified School District (CUSD). Within the District, educational services are provided through one high school, two middle schools, eight elementary schools, and one continuing educational/alternative programs academy. School-aged students residing within the project development area would likely attend Jefferson Elementary School and Pine Elementary School, Valley Junior High, and

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⁸ Carlsbad Unified School District. http://www.carlsbadusd.k12.ca.us/our.htm

Carlsbad High School. None of these schools are located within Zone 9 or Zone 22; refer to Figure 5.12-4. The LFMP for Zone 9 states that all of the District's facilities are approaching or currently operating at capacity.

The originally adopted LFMP for Zone 22 identified the need for a General Plan Elementary school site shown within Zone 22. Similarly, mitigation was included for Zone 9 in the adopted LFMP that required construction of an elementary school within the Zone if it was determined by the District that a school was warranted; however, a School Location Plan was recently adopted by the Carlsbad Unified School District updating the need for schools within the City. The Plan does not identify the future need for a school within Zones 9 or 22, and therefore, the requirement to provide for school facilities is limited to the payment of school fees.

5.12.9.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the performance standard that school capacity to meet the projected enrollment within the zone as determined by the appropriate school district must be provided prior to projected occupancy.
- Generate a greater number of students than the current Carlsbad Unified School District can accommodate, thereby necessitating the development of new school, the construction of which may cause significant environmental impacts.

5.12.9.3 Environmental Impact

As the Ponto Vision Beachfront Village Plan is intended to guide development within the Ponto Area, and not provide a specific plan for development, it is difficult to calculate the number of school-aged children that would ultimately be generated by future development of the site. However, the CUSD provides projection figures to estimate the number of school-aged children that are generated by residential development within the District. These rates are as follows:

School Level	Students per Single-Family Unit	Students per Multi-Family Unit
Elementary School	0.2339	0.0898
Middle School	0.1171	0.0397
High School	0.1442	0.0492

Source: Catarini/Holly Springs Environmental Impact Report. October 2004.

As the LFMPs assume that all CUSD schools are currently at or over capacity, the construction of new schools may be required in the future to provide adequate educational services to the school-aged population within the City. However, implementation of the Vision Plan is not anticipated to generate a greater number of students than the current Carlsbad Unified School District can accommodate. Under the Vision Plan, the project site

would be developed at a lower density than that allowed under the existing General Plan Land Use designations. Therefore, a fewer number of dwelling units would be constructed, thereby resulting in a decrease of the number of school-aged children than that assumed for growth projection purposes within the LFMPs. Future impacts on school facilities would therefore be less than that anticipated by the LFMPs for Zones 9 and 22.

Individual landowners within the development area would be required to pay school fees to offset the cost of providing school facilities and educational services. As the amended LFMPs for Zones 9 and 22 do not identify the need for a school within the respective Zones, school facilities requirements within the Zones are limited to the payment of school fees for the financing of continued service. No additional special conditions are currently required by the LFMP for either Zone 9 or Zone 22. As such, the performance standard for school facilities is anticipated to be met through buildout. No significant impacts on school facilities or services would occur as the result of implementation of the Vision Plan.

5.12.9.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.9.5 Impact After Mitigation

No significant impacts to school facilities would occur with the proposed project.

5.12.10 Sewer Facilities

5.12.10.1 Existing Conditions

Three agencies currently provide sewer service for the City of Carlsbad: the City of Carlsbad Sewer Service District (CSSD), the Leucadia Wastewater District (LWD), and the Vallecitos Water District (VWD). Sewer service for the Ponto Area would be provided by the CSSD.

Three Leucadia Wastewater District sewer force mains currently run at an angle through the project site and along existing internal streets. With implementation of the Vision Plan, these lines are proposed for relocation to the western portion of the site to run parallel to the northbound lane of Carlsbad Boulevard. Relocation of these force mains would facilitate development of the proposed mixed-use center, the community art/nature center, and the pedestrian underpass to the west side of Carlsbad Boulevard.

5.12.10.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

 Not meet the performance standard that trunk line capacity to meet demand as determined by the appropriate sewer district must be provided concurrent with development. • Require the construction of new sewer facilities, the construction of which may cause significant environmental impacts.

5.12.10.3 Environmental Impact

Sewer service to the Ponto Area would be provided through one of two alternatives; refer to Figures 5.13-5 through 5.13-7. One alternative would direct the entire project sewage flow to the southeast corner of the Resort Hotel area and tie into an existing 10" stub at the Knots Lane Lift Station (City of Carlsbad Drawing #357-5B). The second alternative would involve construction of a new lift station to service the area north of Avenida Encinas, with connection to an existing 15" gravity main draining northerly towards Poinsettia Avenue. The area south of Avenida Encinas (Resort Hotel) would drain towards the southeast corner of its site and connect to the Knots Lane Lift Station, similar to Alternative 1.

On-site sewer improvements would occur concurrent with development to ensure that conformance with the LFMP performance standard is maintained over the buildout of the Ponto Area. Sewerage facilities are available to serve the site, with minor improvements required to facilitate service for future development. According to the Zone 9 LFMP, existing and proposed facilities meet the adopted performance standard to the buildout of the Zone. All future development within Zones 9 and 22 would be required to pay the appropriate connection fees for sewerage service.

All public facilities, including water distribution and wastewater treatment facilities have been planned and designed to accommodate the growth projections for Zones 9 and 22 at buildout. Although future development on the project site would increase the overall demand for sewerage services over existing conditions, such development would not result in an overall increase in the City's growth projections. As the density proposed by the Vision Plan is reduced as compared to the density anticipated by the LFMP buildout projections, capacity would be sufficient to serve the project site, and the new demand on the existing sewer facilities would not result in a significant impact due to the need to substantially expand or construct new sewerage facilities.

Construction of new sewerage facilities to serve the project site may result in significant impacts. Potential impacts may include impacts to traffic and circulation, air quality, noise, biological resources, cultural resources, geology and soils, hazardous materials, grading aesthetics, and water quality/hydrology. These resources have been evaluated in Chapter 5.0 of this EIR, and mitigation measures are proposed, as applicable, to reduce impacts to less than significant. These mitigation measures would apply to construction of the proposed sewerage facilities required for the project site and would mitigate potential impacts to a level that is less than significant.

5.12.10.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.10.5 Impact After Mitigation

No significant impacts to sewerage facilities would occur with the proposed project.

5.12.11 Water Distribution Facilities

5.12.11.1 Existing Conditions

Three water districts currently serve development within the City of Carlsbad. Water service to Zones 9 and 22 is provided by the Carlsbad Municipal Water District (CMWD), which also provides service to the majority of the City. The Vallecitos Water District and the Olivenhain Municipal Water District also provide water service within portions of the City of Carlsbad. Currently, the CMWD relies exclusively on imported potable water for residential, commercial, and industrial uses.

The Zone 9 LFMP shows an existing 8" water line (to be abandoned) running from Carlsbad Boulevard across Ponto Drive and across the railroad tracks to Windrose Circle. The LFMP proposes three water lines to serve the Ponto Area: one 12" line running from Windrose Circle to Carlsbad Boulevard; one 12" line running along Carlsbad Boulevard from Avenida Batiquitos to La Costa Avenue (including P.R. Meter Station; and, one 12" line running along Ponto Drive from Avenida Batiquitos to the existing 8" water main. The Zone 22 LFMP indicates an existing 10" water line running parallel to Carlsbad Boulevard and east to Windward Circle. The Zone 22 LFMP shows a proposed 16" water line along Ponto Drive, and a 12" water line proposed just north of Ponto Drive in the southern portion of Zone 22.

The LFMP standards for Zones 9 and 22 require that line capacity to meet demand as determined by the appropriate water district must be provided concurrent with development. Additionally, prior to development, a minimum 10-day average storage capacity must be provided to the development site.

The City of Carlsbad Municipal Water District Water Master Plan Update (2003) evaluates water demand within the City and proposes improvements to accommodate future growth. The Master Plan evaluates water demand based upon the General Plan land uses proposed to determine the projected average volume of water demand. The CMWD applies unit demands for single- and multi-family land uses to the projected number of dwelling units, which account for both domestic and irrigation water use. The unit demand for non-residential land use is applied to the building area, and accounts for interior water use as well as on-site irrigation demands. The unit demand is based on an assumed mix of land use types and is appropriate for demand projections of the overall water distribution system.

The estimated water demand per unit for future growth is given in the following table:

Unit Demands for Ultimate Projections Growth

Land Use Type	Projected Water Use Factor	Development Unit
Single-Family Residential	550 gallons per day	Per dwelling unit
Multi-Family Residential	250 gallons per day	Per dwelling unit
Non-Residential	2,300 gallons per day	Per 10,000 square feet of building area

Source: Carlsbad Municipal Water District Water Master Plan Update. March 2003.

In addition, the South Carlsbad State Beach is included in Zone 22. Average unit water demand for the facilities within the State Beach are given in the adopted LFMP for Zone 22 as follows:

Unit Demands for South Carlsbad State Beach Facilities

Land Use Type	Average Use Rate	Unit
Campsites (Four people/Campsite)	30 gallons per day	Per person
Day Use (Four people/Parking Space)	20 gallons per day	Per person

Source: City of Carlsbad Local Facilities Management Program Zone 22.

The CMWD Master Plan also provides requirements for water demands caused by fire emergency. Demand is estimated in gallons per minute and is based upon the recommendations of the City of Carlsbad Fire Department. Water demands for fire flow are given in the table below.

Fire Flow Requirements

Land Use	Fire Flow (in gallons per minute)
RM	2,500
RHM	3,000
C/O	3,000-4,000

Source: City of Carlsbad Local Facilities Management Program Zone 22.

5.12.11.2 Thresholds for Determining Significance

The significance thresholds used for this section are based on Appendix G of the CEQA Guidelines, as well as performance standards established in the LFMPs for Zones 9 and 22. For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Not meet the performance standard that line capacity to meet demand as determined by the appropriate water district must be provided concurrent with development.
- Not provide minimum 10-day average storage capacity prior to any development.

5.12.11.3 Environmental Impact

Water distribution facilities have been planned and designed to accommodate the growth projections for Zones 9 and 22 at build-out. Although future development on the project site would increase the overall demand on the City's water supply over existing conditions, such development would not result in an overall increase in the City's growth projections over that anticipated, and therefore, future development of the Ponto Area would not exceed the water service demands planned for. The LFMP performance standard requires that all future development be required to install water distribution facilities to provide adequate water service as a condition of development, thereby ensuring that an adequate water supply is available to serve future uses.

According to the LFMPs for Zones 9 and 22, individual property owners would be required to pay water connection fees to contribute to the financing for construction of water distribution facilities that would serve the Ponto Area. As line capacity would be provided to meet project demand concurrent with the development proposed, development of the project site would not result in a significant impact to water distribution facilities. Implementation of the Vision Plan would be in conformance with the ultimate buildout of Zones 9 and 22 performance standards to the buildout of the zone. In addition, the adopted LFMPs for Zones 9 and 22 state that the 10-day storage capacity requirement can be met.

As the Ponto Vision Plan would result in lower density than initially anticipated by the City, water demand would be lower than the projected estimate for the site's total demand upon buildout of Zones 9 and 22. Therefore, it is anticipated that the performance standards would be met and that implementation of the Vision Plan would not result in a significant adverse impact to the City's water distribution system.

Construction of new water distribution facilities or improvements to existing systems to serve the project site may result in significant indirect environmental impacts. Potential impacts may include impacts to traffic and circulation, air quality, noise, biological resources, cultural resources, geology and soils, hazardous materials, grading aesthetics, and water quality/hydrology as grading and construction activities occur. Potential impacts to these resources have been evaluated in Chapter 5.0 of this EIR, and mitigation measures are proposed as applicable to reduce impacts to less than significant.

5.12.11.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified as a result of the proposed project.

5.12.11.5 Impact After Mitigation

No significant impacts to water distribution facilities would occur with the proposed project.

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Figure 5.12-1 Local Facilities Management Zones 9 and 22

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Figure 5.12-2 Parks Districts - LFMP Zones 9 and 22 - Southwest Quadrant

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Figure 5.12-3 School Districts

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Figure 5.12-4 Storm Drain Realignment

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Figure 5.12-5 Fuel Line and Force Main Realignment

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Figure 5.12-6 Backbone Sewer System - Alternative 1: Single-Gravity System

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Figure 5.12-7 Backbone Sewer System - Alternative 2: Two Independent Systems

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